Date: ........................................
Customer: ..................................
Contact: ....................................
Reported problem: .................................................................................................
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Pump Typ: .................................
Serial number: ............................  ZG-No.: ....................................................

Start-up oft he pump system: ....................... (month/year)

New plant ☐ existing plant ☐ year of erection: .......................  Replacement of existing pumps: yes ☐ no ☐

Total duty: ...............................
Refrigerant: ............................... Quantity: ....................... (kg)
Refrigerant Oil: ............................. (brand name or specification)
Quantity: ................................. (L)

Total quantity of pumps: ...........................
Control oft he pumps: ☐ 100% / Standby ☐ 50% / 50% ☐ .................................
switchover: ☐ time ☐ hours of operation
Minimum stand-still period ............... Min after stoppage
Minimum run time ............... Min after restart

Pumping ratio: .............................
Flow rate: ........................... m³/h
Differentil pressure: ......................... bar (p behind the pump − p surge drum)
Hours of operation: ...........................

Voltage: ............................... V
Frequency control: yes ☐ no ☐, if yes, between ..........Hz (Min.) and .......Hz (Max.)

How ist he minimum flow provided?
Always flow into the system, at least .......... m³/h
Bypass line installed with ☐ ............... mm
Bypass valve: ................................. (brand and type),
Bypass valve set at ............... bar or
in case of CO2 ☐ of permanent open orifice ............... mm
Evaporating temperature in the surge drum: ............................
Field of application:  HP ☐ LP ☐
Rotation direction tested yes ☐ no ☐

Installation: Suction line ☐: ............... mm
Height above suction flange to bottom of drum: ............... m
**Fittings in the suction line:**
- Valve Ø ................. mm
- Typ .......................... (brand, model)
- Automatic operated: yes [ ] no [ ]
- Open during stand-still? yes [ ] no [ ]
- Filter yes [ ] no [ ]

**Fittings in the discharge line:**
- Discharge valve .......................... (brand, model)
- Check valve .......................... (brand, model)

**Pump alignment:**
- is the pump installed stress-free and aligned properly  yes [ ] no [ ]

**Safety equipment:**
- Temperature switch connected yes [ ] no [ ]
- Differential pressure switch yes [ ] no [ ]
- Flow switch yes [ ] no [ ]

**Surge drum:**
- horizontal [ ] or vertical [ ]
- Diameter............................... mm
- Length: .................................... mm
- Minimum level setpoint ............... mm (to bottom of surge drum)
- Vortex breakers in the downleg yes [ ] no [ ]

**Oil drainage:**
- manual [ ] automatic [ ]
- Sampling location: ..........................
- Oil refilled since commissioning? yes [ ] no [ ]
- If yes, how much oil? ............ L

**Compressor:**
- Piston [ ] Screw [ ]
- Compressor capacity: ...................... kW
- Max. pressure difference per day........... bar
- Amount of pressure variations > 1 bar per hour ............

**Evaporator:**
- Air cooled [ ]
- Plate [ ]
- Freezer [ ]
- Other ........................................
- Distance from evaporator to the pump: .......... m
- Height from evaporator to the pump: .......... m
- Is each evaporator separately controlled?: yes [ ] no [ ]
- Amount of evaporator: .......... pcs

**Condenser:**
- Evaporating (aircooled) [ ]
- Plate Condenser [ ]
- Other: ........................................
- Control of the condensate at: HP [ ] LP [ ]

Please attach a sketch of pipework to pump and other pumps showing valve types and positions. If horizontal headers are used to one or more pumps, please indicate all pipe sizes on sketch. Thank you for your help!
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